

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application:

Listing of Claims:

1-2. Canceled.

3. (Previously Presented) A protective device for transmitting electromagnetic signals of a desired frequency band, said protective device comprising:

(a) an outer conductor,

(b) an inner conductor extending coaxially within said outer conductor, said inner and outer conductors being spaced apart,

(c) a radio frequency impedance control (RFIC) tube disposed between said inner conductor and said outer conductor to control the impedance of said inner conductor, the RFIC tube being shaped to define an opening, and

(d) a shunt conductor for shunting electromagnetic signals traveling within said inner conductor which fall outside of the desired frequency band, said shunt conductor comprising a first end, a second end and an intermediary portion which connects the first and second ends, the first end of said shunt conductor being coupled to said inner conductor and the second end of said shunt conductor being coupled to said outer conductor,

(e) wherein the intermediary portion of said shunt conductor is non-linear along the entirety of its length and comprises first and second contiguous curved portions, the first portion extending out from said inner conductor and through the opening in said RFIC tube along a first curved path, the second portion of said shunt conductor wrapping around said RFIC tube along a second curved path.

4. Canceled.

5. (Previously Presented) The protective device of claim 3 wherein the opening in said RFIC tube has a longer dimension in length than width, the length of the opening extending at a right angle relative to the longitudinal axis for said RFIC tube.

6-13. Canceled.

14. (Previously Presented) A protective device for transmitting electromagnetic signals of a desired frequency band, said protective device comprising:

(a) an outer conductor,

(b) an inner conductor extending coaxially within said outer conductor, said inner and outer conductors being spaced apart,

(c) a shunt conductor for shunting electromagnetic signals traveling within said inner conductor which fall outside of the desired frequency band, said shunt conductor comprising a first end and a second end, the first end of said shunt conductor being coupled to said inner conductor,

(d) a first pair of insulators constructed of a first dielectric material, said first pair of insulators insulating at least a portion of said inner conductor from said outer conductor, each of the first pair of insulators having an inner surface, an outer surface, a first end and a second end, the outer diameter of each of the first pair of insulators being unequal at its first and second ends, and

(e) a second dielectric material disposed between the first pair of insulators and at least one of the inner conductor and the outer conductor.

15. (Previously Presented) The protective device of claim 14 wherein the shape of said first pair of insulators can be reconfigured so as to change the RF impedance for a portion of the length of the inner conductor.

16. (Previously Presented) The protective device of claim 15 wherein the shape of the first pair of insulators can be reconfigured to provide the protective device with both narrow-band and wide-band capabilities.

17. (Previously Presented) The protective device of claim 14 wherein said first pair of insulators is sized and shaped so as to define at least one region of air between said first pair of insulators and at least one of said inner conductor and said outer conductor.

18. (Previously Presented) The protective device of claim 14 wherein said first pair of insulators is sized and shaped such that no substantial region of air is defined between said inner conductor and said outer conductor.

19. Canceled.

20. (Previously Presented) The protective device of claim 14 further comprising a second pair of insulators which includes a first annularly-shaped portion and a second annularly-shaped portion, said first and second annularly-shaped portions having different thicknesses.

21. (Previously Presented) The protective device of claim 14 further comprising a second pair of insulators which is shaped to include a projection which extends between said inner and outer conductors.

22. (Previously Presented) The protective device of claim 21 wherein a portion of the inside diameter of said outer conductor is approximately 2.2 through 2.5 times the outside diameter of said inner conductor so as to define at least one air gap therebetween.

23. (Previously Presented) The protective device of claim 22 wherein each projection of said second pair of insulators projects into a corresponding air gap between said inner and outer conductors.

24. (Original) The protective device of claim 14 wherein said first pair of insulators comprises at least two different dielectric constant materials.

25-27. Canceled.

28. (Previously Presented) The protective device of claim 3 wherein the second portion of said shunt conductor is in the form of a helix that coils around said RFIC tube along a portion of its length.

29-30. Canceled.

31. (Previously Presented) The protective device of claim 14 further comprising a second pair of insulators, said second pair of insulators being inserted between the inner and outer conductors, said second pair of insulators causing said protective device to operate as a wide-band device.

32. (Previously Presented) The protective device of claim 3 wherein the second portion of the shunt conductor wraps around the RFIC tube in a concentric relationship relative thereto.

33. (Currently Amended) A protective device for transmitting electromagnetic signals of a desired frequency band, said protective device comprising:

(a) an outer conductor,

(b) an inner conductor extending coaxially within said outer conductor, said inner and outer conductors being spaced apart,

(c) a radio frequency impedance control (RFIC) tube disposed between said inner conductor and said outer conductor to control the impedance of said inner conductor, the RFIC tube being shaped to define an opening, and

(d) a shunt conductor for shunting electromagnetic signals traveling within said inner conductor which fall outside of the desired frequency band, said shunt conductor comprising a first end, a second end and an intermediary portion which connects the first and second ends, the first end of said shunt conductor being coupled to said inner conductor and the second end of said shunt conductor being coupled to said outer conductor,

(e) wherein the intermediary portion of said shunt conductor comprises first and second contiguous portions, the first portion extending out from said inner conductor and through the opening in said RFIC tube, the second portion of said shunt conductor helically coiling ~~being in the form of a helix that coils~~ around the inner conductor ~~RFIC tube~~ along a portion of its length.

34. (Previously Presented) The protective device of claim 14 wherein the outer surface of each of the first pair of insulators is spaced apart from the outer conductor at one of its ends.

35. (Previously Presented) The protective device of claim 14 wherein the inner surface of each of the first pair of insulators is spaced apart from the inner conductor at one of its ends.

36. (Previously Presented) The protective device of claim 35 wherein the end of each of the first pair of insulators that is spaced apart from the inner conductor has a stepped-shaped configuration in lateral cross-section.